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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,777	09/10/2003	Henry Petteri Haverinen	KOLS.047PA	4888
76385 7590 12/30/2008 Hollingsworth & Funk, LLC 8009 34th Avenue South Suite 125 Minneapolis, MN 54425				
EXAMINER AJAYI, JOEL				
ART UNIT 2617		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/659,777

Applicant(s)

HAVERINEN, HENRY PETTERI

Examiner

JOEL AJAYI

Art Unit

2617

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 6-8 and 13-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 6-8, 13-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1, 2, 6-8, 13-32 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 8, 13, 15-17, 19, 20, 24-28, 32 are rejected under 35 U.S.C. 102(e) as being unpatentable over **LaPorta et al. (U.S. Patent Number: 6,654,359)**.

Consider **claim 1**; LaPorta discloses a method, comprising: allocating a tunnel IP address for a tunnel to be formed for data transmission of a terminal connected to a first access device, to a corresponding host, to which tunneling IP address the tunnel is bound, and transferring at least the tunneling IP address from the first access device to a second access device (base station) in response to detecting a need to change the connection of the terminal to be carried out by the second access device (if the handoff is between base stations in the same domain, the same care of address/tunneling IP address is used) (column 10, lines 46-63).

Consider **claim 2**; LaPorta discloses tunnelling attributes, at least an IP address of the corresponding host and the tunnelling IP address allocated to the terminal in the first access device, are determined in an authentication server as a part of the authentication of the terminal

before arranging the tunnel to the corresponding host, the tunnelling attributes are transferred to the first access device in response to a successful authentication (column 14, lines 61-63; column 16, line 63-column 17, line 12), the IP address used in the data transmission of the terminal and the tunnelling IP address for the tunnel to be formed for the data transmission of the terminal that is used as an end point of the tunnel transferring data of the terminal are allocated in the first access device to the terminal (column 14, lines 61-63; column 16, line 63-column 17, line 12), the tunnel determined by the tunnelling attributes is bound in the first access device to the tunnelling IP address, the tunnel, whose end points include the tunnelling IP address and the IP address of the corresponding host, is formed and thereafter the data transmission to the tunnelling IP address is transferred to a network interface of the first access device (column 14, lines 61-63; column 16, line 63-column 17, line 12).

Consider **claims 8, 24, 32**; LaPorta discloses that the first access device and the second access device are access points of a wireless local network connected to one another through a wired local network (column 2, lines 33-40).

Consider **claim 13**; LaPorta discloses an access device for a telecommunication network, wherein the access device is configured to provide a terminal with a connection, the access device is configured to allocate a tunnelling IP address for a tunnel to be formed for the data transmission of the terminal, to which tunnelling IP address the tunnel is bound the access device is configured to form the tunnel between a corresponding host and an access device for data transmission of the terminal (column 10, lines 46-63), and the access device is configured to send at least said tunnelling IP address to a second access device in response to detecting a need

to change the connection of the terminal to be implemented by the second access device (column 10, lines 46-63).

Consider **claim 15**; LaPorta discloses that the access device is configured to change the binding of the tunnelling IP address to temporarily denote the network interface of the second access device (column 10, lines 46-63).

Consider **claim 16**; LaPorta discloses an access device for a telecommunication network comprising means for providing a terminal with a connection and means for forming a tunnel between a corresponding host and an access device for data transmission of the terminal (column 10, lines 46-63), wherein the access device is configured to receive at least a tunnelling IP address allocated for a tunnel for the data transmission of the terminal in response to detecting a need to change the connection of the terminal to be implemented by the access device (column 10, lines 46-63), the access device is configured to form a binding between the tunnelling IP address and the network interface, and the access device is configured to update the information concerning the new binding between the network interface and the tunnelling IP address to at least one network node included in the system (column 10, lines 46-63).

Consider **claims 17, 20, 27**; LaPorta discloses that the access device is configured to transfer data after updating between the terminal and the corresponding host using the binding formed (column 5, lines 13-21; column 10, lines 46-63).

Consider **claim 19**; LaPorta discloses a communication apparatus comprising a processor and memory, wherein the apparatus is configured to form a tunnel between a corresponding host and an apparatus for data transmission of a terminal (column 5, lines 13-21; column 10, lines 46-63), the apparatus is configured to receive at least a tunneling IP address allocated for a tunnel

for the data transmission of the terminal in response to detecting a need to change the connection of the terminal to be implemented by the apparatus (column 10, lines 46-63), the apparatus is configured to form a binding between the tunneling IP address and the network interface (column 10, lines 46-63), and the apparatus is configured to update the information concerning the new binding between the network interface and the tunneling IP address to at least one network node included in the system (column 10, lines 46-63).

Consider **claims 25, 28**; LaPorta discloses that the network node is a router in a local network (column 5, lines 13-21).

Consider **claim 26**; LaPorta discloses a method comprising: receiving at least a tunneling IP address allocated for a tunnel for data transmission of a terminal in response to detecting a need to change the connection of the terminal to be implemented by a second access device (column 10, lines 46-63), forming a binding between the tunneling IP address and a network interface of the second access device, and updating the information concerning the new binding between the network interface and the tunneling IP address to at least one network node included in the system of the terminal (column 10, lines 46-63).

Claims 6, 7, 14, 18, 21-23, 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over **LaPorta et al. (U.S. Patent Number: 6,654,359)** in view of **Johansson et al. (U.S. Patent Application Number: 2002/0080752)**.

Consider **claims 6, 22, 30**; LaPorta discloses the claimed invention except: the information concerning the new binding is sent to at least one network node connected to the

first access device and to the second access device to the routing table thereof using a Neighbour Discovery protocol.

In an analogous art, Johansson discloses that the information concerning the new binding is sent to at least one network node connected to the first access device and to the second access device to the routing table thereof using a Neighbour Discovery protocol (neighbor advertisement) (paragraph 18; paragraph 79, lines 1-6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of LaPorta by including neighbor advertisement, as taught by Johansson, for the purpose of optimizing routing techniques.

Consider **claims 7, 18, 21, 23, 31**; Johansson discloses that the information concerning the new binding is sent to at least one network node connected to the first access device and to the second access device to an ARP table (Address Resolution Protocol) thereof using an ARP protocol (paragraph 79, lines 1-6).

Consider **claims 14, 29**; Johansson discloses that the binding refers to the binding between a MAC address of the network interface and the tunnelling IP address (paragraph 86).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Joel Ajayi whose telephone number is (571) 270-1091. The Examiner can normally be reached on Monday-Thursday from 7:30am to 5:00pm and Friday 7:30am to 4:00 pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Lester Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Art Unit: 2617

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Joel Ajayi

/NICK CORSARO/

Supervisory Patent Examiner, Art Unit 2617